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SAMPLE DEPOSITION METHOD AND SYSTEM**ABSTRACT OF THE INVENTION**

5 A method and system to deposit rapidly, accurately and efficiently liquid droplets onto a sample plate. A liquid from which the droplet is formed contains sample molecules, matrix molecules or a mixture of both sample and matrix molecules. A sample plate is positioned with respect to a position below a portion of the liquid, such as a droplet. A power supply forms an electric field between the sample plate
10 and the liquid, which pulls the droplet to a target location on the sample plate. A plurality of capillary columns is provided for simultaneous or successive multiple depositions via application of one or more high voltage pulses between the liquid sample array and a sample plate.